



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

PART III

1893.

JULY

PRICE FIFTY CENTS.

PROCEEDINGS
OF
The American Microscopical Society.

ORGANIZED 1878. INCORPORATED 1891.

ISSUED QUARTERLY.

FIFTEENTH ANNUAL MEETING,

HELD AT

ROCHESTER, N. Y., AUGUST 9, 10, 11, and 12, 1892.

VOLUME XIV.

WASHINGTON, D. C.
JUDD & DETWEILER, PRINTERS.
1893.

(Entered at the post office, Washington, D. C., as second-class matter.)

PROCEEDINGS
OF
The American Microscopical Society.

FIFTEENTH ANNUAL MEETING,

HELD AT

ROCHESTER, N. Y., AUGUST 9, 10, 11, and 12, 1892.

VOLUME XIV.

WASHINGTON, D. C.
JUDD & DETWEILER, PRINTERS.
1893.

OFFICERS OF THE SOCIETY

ROCHESTER MEETING, 1892.

PRESIDENT.

Dr. MARSHALL D. EWELL, F. R. M. S. Chicago, Ill.

VICE-PRESIDENTS.

Dr. ROBERT REYBURN Washington, D. C.
Dr. RICHARD J. MUNN Savannah, Ga.

SECRETARY.

Dr. WM. H. SEAMAN Washington, D. C.

TREASURER.

C. C. MELLOR Pittsburgh, Pa.

ELECTIVE MEMBERS OF EXECUTIVE COMMITTEE.

Dr. JOHN A. MILLER Buffalo, N. Y.
Prof. E. W. CLAYPOLE Akron, Ohio.
Dr. J. MELVIN LAMB Washington, D. C.

PAST PRESIDENTS.

Ex officio members of the Executive Board.

1. R. H. WARD, M. D., F. R. M. S., of Troy, N. Y.,
at Indianapolis, Ind., 1878.
2. R. H. WARD, M. D., F. R. M. S., of Troy, N. Y.,
at Buffalo, N. Y., 1879.
3. H. L. SMITH, LL. D., F. R. M. S., of Geneva, N. Y.,
at Detroit, Mich., 1880.
4. J. D. HYATT, F. R. M. S. (absent), of New York City,
at Columbus, Ohio, 1881.
5. GEO. E. BLACKHAM, M. D., F. R. M. S., of Dunkirk, N. Y.,
at Elmira, N. Y., 1882.
6. ALBERT MCCALLA, PH. D., F. R. M. S., of California,
at Chicago, Ill., 1883.
7. J. D. COX, LL. D., F. R. M. S., of Cincinnati, Ohio,
at Rochester, N. Y., 1884.
8. H. L. SMITH, LL. D., F. R. M. S., of Geneva, N. Y.,
at Cleveland, Ohio, 1885.
9. T. J. BURRILL, PH. D., F. R. M. S., of Champaign, Ill.,
at Chautauqua, N. Y., 1886.
10. WM. A. ROGERS, A. M., F. R. M. S., of Waterville, Me.,
at Pittsburgh, Pa., 1887.
11. D. S. KELLICOTT, PH. D., F. R. M. S., of Columbus, Ohio,
at Columbus, Ohio, 1888.
12. WM. J. LEWIS, M. D., F. R. M. S., of Hartford, Conn.,
at Buffalo, N. Y., 1889.
13. GEO. E. FELL, M. D., F. R. M. S., of Buffalo, N. Y.,
at Detroit, Mich., 1890.
14. FRANK L. JAMES, PH. D., M. D., F. R. M. S., of St. Louis, Mo.,
at Washington, D. C., 1891.

CONTENTS.

	Page
Address of the President. The Relation of the Microscope to the	
Administration of Justice. M. D. Ewell, M. D.	1
Minutes of Proceedings of the Society.	12
Address of Welcome. Professor Lattimore	12
Response by President Ewell.	13
Report of Committee on World's Fair	14, 19
Universal Screw	15
New Constitution	15, 16, 24
Treasurer.	36
Nominating Committee, Appointment of.	16
Report of.	33
Discussion on Methods of Decalcification	16
A Hæmatoxylon Solution	17
The Diagnosis of Tumors	17
The World's Fair	19
Bacteria in Human Blood	20
Concave Glass Mirror	21
Blood and Blood Stains	24
Examination of Potable Water.	26
Ruled Plate. Eichora.	31
Cheap Microscopes	32
Description of Bausch & Lomb factory.	27
Gundlach works.	35
Annual soiree.	29
Prizes for original work	37
Constitution.	39
By-Laws.	41
Concave Mirror, On the. M. D. Ewell.	43
Numerical Aperture, Measurements of. M. D. Ewell.	44
Zentmayer's American-Continental Stand	48
Zentmayer's Dissecting Microscope	51
Griffith Microscope. E. H. Griffith.	53
The Wenham Binocular: Can it be made adjustable to a variable tube length? Thomas D. Biscoe.	57
On the Value of Cheap Microscopes for Educational Purposes. E. W. Claypole.	60
Microscopical Researches of the Corpuscular Elements of Blood. M. L. Holbrook.	63
The Diagnosis of Tumors. William C. Krauss	71
A Crustaceous Parasite of the Miller's Thumb. D. S. Kellicott.	76

	Page
Structure and Development of Buds in the Leaf of <i>Bryophyllum calycinum</i> , Salisb. W. W. Rowlee.....	80
Photomicrographs by Gaslight. George M. Sternberg.....	85
Blood and Blood Stains in Medical Jurisprudence. Clark Bell.....	91
Methods of Decalcification in which the Structural Elements are Preserved. Prof. S. H. Gage.....	121
An Aqueous Solution of Hæmatoxylon that does not Readily Deteriorate. Prof. S. H. Gage.....	125
The Microscope in the Workshop. William A. Rogers.....	128
A Word Concerning Filar Micrometers. William A. Rogers.....	132
Elephantiasis, Histology of a Case of. V. A. Latham.....	133
Photomicrographs, Lantern Slides of. A. Clifford Mercer.....	141
A New Mounting Table. William N. Preston.....	150
A Practical Drying Oven. William N. Preston.....	152
A Reference Model. Susannah P. Gage.....	154
An Early American Microscope. W. H. Seaman.....	156
Note on Papers by Dr. F. Vincentini on Microörganisms of the Buccal Cavity.....	156
Note on George M. Rafter's Remarks on the Biological Examination of Potable Water.....	158
Necrology. Thomas H. Urquhart.....	159
Henry Weld Fuller.....	160
Joseph Zentmayer.....	161
Dr. J. Gibbons Hunt.....	166
List of Members.....	168
Biennial Index for 1891 and 1892.....	179

PREFACE.

This number completes the volume for the Rochester meeting of 1892. As stated in the April circular, the original matter was arranged in the expectation of publishing a summary of current researches to constitute one of the parts, and when it was decided that this was unauthorized, the April circular was issued at the time this part should have appeared and took its place. This and the preceding volume for 1891 can be conveniently bound together, and the biennial index then forms an index for the book as bound, and the last two circulars, if desired, may be bound with them. The title page and index are at the end of this part.

The present form of publication renders it very desirable that members should pay their dues promptly, so as to save confusion and difficulty in sending out the successive numbers. The first part, this year, was sent to all whose names were on the list of members, whether they had paid or not, but hereafter the by-laws will be strictly followed in this respect, and no parts sent before payment. The effort now in progress to improve the character of the Proceedings and render them a better representation of the scientific work of the country will demand the most careful management for its success, and the question of obtaining sufficient money to meet the actual cost of a really first-class publication is the most serious problem we have before us. The only possible solution is to restrict the amount of matter carefully to the money we have to pay for printing it, and members of the Society should feel that its future is in their own hands—that just in proportion as they work for an increase in the membership and income of the Society, just in that proportion will the officers of the Society be enabled to render it more useful to its members.

The Society does not hold itself responsible for the opinions expressed by members in its published Proceedings unless indorsed by a special vote.

AMERICAN MICROSCOPICAL SOCIETY.

CIRCULAR.

The subscriber desires to inform the members of the American Microscopical Society and others that he can supply any or all of the Volumes of the Proceedings of the Society at the following prices :

1878-9, Indianapolis and Buffalo meet'g, Vol. I,	\$.80
1880, Detroit	" II, .80
1881, Columbus	" III, 1.10
1882, Elmira	" IV, 1.50
1883, Chicago	" V, 2.00
1884, Rochester	" VI, 2.00
1885, Cleveland	" VII, 2.00
1886, Chautauqua	" VIII, 2.00
1887, Pittsburgh	" IX, 2.00
1888, Columbus	" X, 2.00
1889, Buffalo	" XI, 2.00
1890, Detroit	" XII, 2.00
1891, Washington	" XIII, 2.00
1892, Rochester	" XIV, 2.00

1878-9 are paged continuously. The volumes for 1882-4-6-8-90-92 contain biennial indexes.

The index for 1890 covers the preceding years.

Copies mailed on receipt of the price.

C. C. MELLOR,
Treasurer A. M. S.

77 Fifth Avenue, Pittsburgh, Pa.